

REMARKS

I. Status of the Claims

Claims 1-14 and 16-55 are pending. Applicants have amended claims 1, 44, 45, and 48 to incorporate the subject matter of claim 15, which has been canceled. Applicants have amended claims 16 and 17 to depend on claim 1. Applicants have amended claims 1, 45, and 48, and added new claim 50-55 to expressly claim subject matter deleted from claims 1, 45, and 48. No new matter has been added, and support for these amendments can be found throughout the application as filed, including the as-filed claims.

The Examiner maintains the restriction requirement, withdrawing claims 5-6, 8-9, and 25-37 from consideration as drawn to non-elected subject matter. Office Action at 2. Furthermore, the Examiner states that claims 1-4, 7, 10-24, and 38-49 are only examined to the extent that they read on the elected group, i.e., where the metal precursor is formula Ib and the metal M is silicon. *Id.* Applicants continue to disagree and, upon an indication of allowable subject matter, expect the Examiner to continue the search and examination of the full scope of the claims to the extent necessary to determine the patentability thereof.

II. Rejections Under 35 U.S.C. § 112, First Paragraph

The Examiner rejects claims 1-3, 10-24, and 38-49 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Office Action at 3. This rejection is improper, because the Examiner misapplies the standards for the written description requirement.

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Applicants initially note that "[t]here is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed. . . . Consequently, rejection of an original claim for lack of written description should be rare." M.P.E.P. § 2163.03.¹ Keeping in mind the rarity of a written description rejection of an original claim (such as in the present case), "the fundamental factual inquiry is whether the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed." M.P.E.P. § 2163.02; *see also Hyatt v. Boone*, 146 F.3d 1348, 1354-55 (Fed. Cir. 1998). Here, that inquiry is satisfied, because the as-filed specification includes the claims that are now being rejected as inadequately described.² Thus, the Examiner has not met the "initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in [the] disclosure a description of the invention as claimed." M.P.E.P. § 2163.04. Because the as-filed claims clearly convey a description of the invention as claimed,³ Applicants request withdrawal of the written description rejections.

¹ Indeed, the issue typically arises in situations having problems not relevant to the present case: (1) amendment affecting a claim; (2) reliance on filing date of parent application under 35 U.S.C. § 120; (3) reliance of priority under 35 U.S.C. § 119; and (4) support for a claim corresponding to a count in an interference. M.P.E.P. § 2163.03; *see also Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1560 (Fed. Cir. 1991)

² We note that the Examiner appears to be using an "invitation to experiment" standard, which is wholly inapplicable to a written description rejection. Office Action at 4; *cf. Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000) ("Put another way, one skilled in the art, reading the original disclosure, must immediately discern the limitation at issue in the claims."). Here, it is indisputable that the original disclosure contains the limitations present in the claims. *Cf.* Office Action at 3.

³ Indeed, the as-filed claims "are part of the specification and may provide or contribute to compliance with § 112." *Hyatt*, 146 F.3d at 1353.

III. Rejections Under 35 U.S.C. § 112, Second Paragraph

The Examiner rejects claims 1-4, 7, 10-24, and 38-49⁴ as indefinite under 35 U.S.C. § 112, first paragraph, for failing to point out and distinctly claim the subject matter which Applicants regard as the invention. Office Action at 4. Applicants disagree for the reasons set forth below.

The proper standard for indefiniteness, of course, is “whether the scope of the claim is clear to a hypothetical person possessing the ordinary level of skill in the pertinent art.” M.P.E.P. § 2171. In each of the seven sub-rejections, Applicants submit that the meaning of the claims, as amended where applicable, would be discernable to a person of ordinary skill in the art. The Federal Circuit instructs: “If the meaning of the claim is discernable, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear.” *Exxon Research & Eng’g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). Stated another way, the “essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity.” M.P.E.P. § 2173.02. With this proper framework in mind, each of the seven rejections are discussed below.

First, claims 1, 45, and 48 are rejected for reciting “cosmetically active group” without also showing “the reaction in such a way that, in group Ib[,] the cosmetically active group is covalently linked to silicon.” Office Action at 4-5. Applicants note that there is no requirement to show the bond between the metal M and cosmetically active

⁴ Applicants note that the Examiner only justifies the rejections of claims 1, 3, 7, 45, 46, and 48. Because the basis for the rejection of the other claims (i.e., claims 2, 10-24, 38-44, 47, and 49) is unclear, Applicants request that the Examiner specifically point out any alleged indefiniteness residing in the other rejected claims.

group. Indeed, one of ordinary skill in the art would understand that the metal M would be bonded to the cosmetically active group. Furthermore, Applicants respectfully submit that claim 1 defines "n" as denoting the valency of the metal. Thus, the meaning of the claim is discernible and not indefinite, even without a showing of a reaction that would create the claimed compound.

Second, claims 1, 45, and 48 are also rejected for reciting "cosmetically active group." Office Action at 5. Applicants respectfully submit that the claim means exactly what it says, i.e., the cosmetically active group is chosen from those groups listed in the claims. And the mere fact that the group is claimed using functional language is not enough to render it indefinite. M.P.E.P. § 2173.05(g); *cf. In re Swinehart*, 439 F.2d 210, 212-213 (CCPA 1971) ("there is no support, either in the actual holdings of prior cases or in the statute, for the proposition, . . . that 'functional' language in and of itself, renders a claim improper"). Furthermore, Applicants address the phrase "cosmetically active group" in the specification in paragraph [019] bridging pages 7 and 8. Thus, the meaning of the claim term is discernible and not indefinite.

Third, claims 1, 45, and 48 are rejected as indefinite for reciting "such as." Office Action at 5. Applicants have amended the claims and added further dependent claims directed to the deleted subject matter. These amendments obviate the rejection.

Fourth, claims 1, 3, 45, and 48 are rejected for reciting "containing," i.e., an open-ended transitional phrase, in the definition of R₁. Office Action at 5. Applicants point out that mere recitation of an open-ended transitional phrase does not in and of itself render the claims indefinite. Furthermore, one of ordinary skill in the art would understand from the plain meaning of the words that the carbon chain contains from 1

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to 30 carbon atoms. The Examiner has failed to establish why one of ordinary skill would be unable to discern the meaning of the claims by virtue of the term "containing." Thus, withdrawal of this rejection is respectfully requested.

Fifth, various (undesigned) claims are rejected for reciting a phrase regarding heteroatoms. Office Action at 5. Applicants respectfully point out that it is unclear which claims the Examiner is rejecting. Furthermore, it appears that, even based on the laconic rejection, that one of ordinary skill in the art would readily understand the phrase. Because the phrase's meaning is sufficiently discernible, it is not indefinite.

Sixth, the Examiner rejects claim 7 for reciting R_2 and R_3 . Office Action at 5-6. Applicants note that $-NR_2$ clearly means that there are two "R" groups bonded to the nitrogen and that $-N^+R_3$ clearly means that there are three "R" groups bonded to the nitrogen. Applicants respectfully highlight the fact that nitrogen is a trivalent atom. Thus, the meaning of claim is discernible and not indefinite.

And seventh, the Examiner rejects claim 46 for reciting a "treating mascara." Applicants respectfully disagree, because the claim's meaning would be readily understood by a person of ordinary skill in the art. For example, Applicants note that at least two U.S. Patents use this term: Nos. 5,770,233 and 5,723,149 to Bonte et al. Furthermore, the claim term means exactly what its name would imply, e.g., a mascara used in treating eyelashes. Thus, the meaning of the claim is discernible and not indefinite.

IV. Rejection Under 35 U.S.C. § 102(b)

The Examiner rejects claims 1-2, 4, 7, 10-14, 19-24, 38-46, and 48-49 as anticipated under 35 U.S.C. § 102(b) by European Patent Application Publication

No. 0 159 628 to Revlon, Inc. ("Revlon"). Office Action at 6. Applicants highlight the fact that the Examiner has only examined group Ib as recited in the pending claims. Office Action at 2. Applicants respectfully traverse this rejection.

Applicants initially note that in order for a reference to anticipate the pending claims, it must teach, either expressly or inherently, each and every claimed element. M.P.E.P. § 2131; *PIN/NIP, Inc., v. Platte Chem. Co.*, 304 F.3d 1235, 1243 (Fed. Cir. 2002). In this case, the Examiner did not reject claim 15 as anticipated by Revlon. Revlon, of course, teaches "a composition for strengthening the tensile strength of hair." Revlon at page 3, lines 27-28. The reference further states: "This characteristic of the silanes of the present invention allows for their application to hair for increasing hair strength, retaining hair configuration such as curls, and providing manageability to hair." *Id.* at page 5, lines 24-27. Accordingly, Applicants have amended independent claims 1, 44, 45, and 48 to incorporate the subject matter of claim 15.⁵ These amendments render the rejection moot.

V. Rejection Under 35 U.S.C. § 103(a)

The Examiner rejects claim 47 as unpatentable under 35 U.S.C. § 103(a) over Revlon. Office Action at 6-7. Applicants disagree, because the Examiner has not set forth a proper *prima facie* case of obviousness.

⁵ Applicants recognize that claim 45 is directed to a composition and claim 47 is directed to a process comprising applying a composition. Regardless, Applicants have incorporated a structural limitation, i.e., "wherein the composition is effective to reduce the brittleness of human nails," into the claim scope. Thus, only compositions that are effective to reduce the brittleness of human nails can anticipate the claim. See *Union Oil Co. v. Atl. Richfield Co.*, 208 F.3d 989, 995 (Fed. Cir. 2000) (claims directed to a regular automobile gasoline correctly construed to exclude aviation or racing fuels from their scope).

Applicants note that the Examiner has the burden of proving a *prima facie* case of obviousness. M.P.E.P. § 2142. To satisfy this burden, she must prove three elements: (1) some suggestion or motivation to modify a reference or combine reference teachings; (2) a reasonable expectation of success; and (3) the prior art reference (or references when combined) teach or suggest all the claim limitations. M.P.E.P. § 2143. Furthermore, the Examiner must set forth "clear and particular" evidence of these elements. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Otherwise, there cannot be the requisite "substantial evidence," which is necessary to sustain an obviousness rejection. *In re Zurko*, 258 F.3d 1378, 1384 (Fed. Cir. 2001); *In re Lee*, 277 F.3d 1338, 1344-45 (Fed. Cir. 2002). In this case, the Examiner fails to establish that, at the barest minimum, all claim limitations are taught or suggested by the asserted prior art reference. Since no *prima facie* case of obviousness has been established, Applicants respectfully assert that the rejection should be withdrawn.

As noted above with regard to the anticipation rejection, every element of claim 45 is not taught or suggested by Revlon. Accordingly, claim 47 is nonobvious. See *In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988) (dependent claims are nonobvious if the independent claim upon which they depend is nonobvious). Applicants respectfully request withdrawal of this point of rejection.

VI. Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

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If the Examiner believes a telephone conference could be useful in resolving any outstanding issues, she is respectfully invited to contact Applicants' undersigned counsel at (202) 408-4322.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: May 6, 2003

By: 

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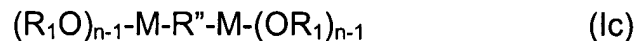
APPENDIX TO AMENDMENT OF MAY 6, 2003

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Amendments to the Claims

1. (Amended) A method of protecting and/or strengthening a keratin material comprising applying to said keratin material [an effective amount of] a composition comprising at least one organometallic compound obtained from at least one metallic precursor chosen from:

(a) at least one metal alkoxide chosen from formulae (Ia), (Ib), (Ic), and (Id) below:



wherein:

- M and M', which may be identical or different, denote a metal atom chosen from the transition metals of groups Ib to VIIb of the Periodic Table, group VIII of the Periodic Table, the lanthanide group of the Periodic Table, aluminum, silicon, boron, tin, magnesium, alkali metals and alkaline-earth metals;

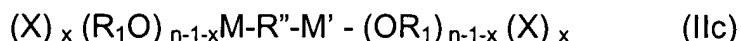
- n denotes the valency of the metal;

- R₁, which may be identical or different, is chosen from linear and branched, saturated and unsaturated hydrocarbon-based radicals containing 1 to 30 carbon atoms,

- R and R', which may be identical or different, are chosen from hydrogen, linear, branched and cyclic, saturated and unsaturated, C₁₋₃₀ hydrocarbon-based radicals, and a cosmetically active group; and

- R" is chosen from -O-, -NR²-, -S-, linear, cyclic and branched, saturated and unsaturated, C₁₋₃₀ divalent hydrocarbon-based radicals, and a cosmetically active group, wherein R² is chosen from linear, cyclic and branched, saturated and unsaturated C₁₋₃₀ hydrocarbon-based radicals;

(b) at least one complex chosen from formulae (IIa), (IIb), (IIc) and (IIId) below:



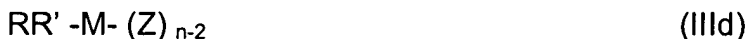
wherein:

- M, M', n, R, R', R" and R₁ have the same meaning as above;

- X is a ligand comprising an atom chosen from nitrogen, phosphorus, sulphur and oxygen; and

- x is the number of atoms which may link to the central metal atom;

(c) at least one metal halide chosen from formulae (IIIa), (IIIb), (IIIc) and (IIId) below:

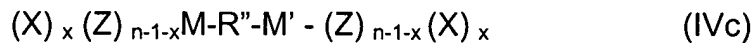


wherein:

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- M, M', n, R, R' and R'' have the same meaning as above; and
 - Z, which may be identical or different, is chosen from a halogen atom; and
- (d) at least one complexes chosen from formulae (IVa), (IVb), (IVc) and (IVd) below:



wherein:

- M, M', n, R, R', R'', X, x and Z have the same meaning as above; [and]

wherein said cosmetically active group is chosen from a colorant group; a photochromic group; a group for screening out UV-A and/or UV-B radiation; a group for promoting adhesion to keratin materials[, such as an amide, urethane, urea, hydroxyl, carboxyl, amino acid or polypeptide group]; a group which facilitates make-up removal; a bacterial or bacteriostatic group; a chelating group[, for example, one which can complex multivalent cations]; a hydroxy acid; a group for preventing hair loss; an antioxidant group; a free-radical-scavenging group; and a vitamin-bearing group; and

wherein said composition is applied to said keratin material in an amount effective to reduce the brittleness of human nails.

16. (Amended) A method according to Claim [15] 1, wherein said amount is effective to obtain at least one of harder nails, stronger nails, [and] less brittle nails, nails which no longer split, and [or] nails which no longer crack.

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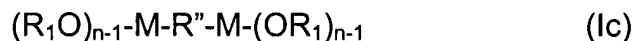
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17. (Amended) A method according to Claim [15] 1, wherein said amount is effective to reduce the brittleness of weakened nails.

44. (Amended) A method of protecting and/or strengthening a keratin material comprising applying to said keratin material an effective amount of a composition comprising at least one organometallic compound, wherein said amount is effective to reduce the brittleness of human nails.

45. (Amended) A composition in the form of a make-up composition, a nail varnish, a varnish base, a nail-care product or a hair-care product, said composition comprising at least one organometallic compound obtained from at least one metallic precursor chosen from:

(a) at least one metal alkoxide chosen from formulae (la), (lb), (lc), and (ld) below:



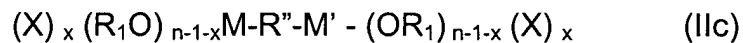
wherein:

- M and M', which may be identical or different, denote a metal atom chosen from the transition metals of groups Ib to VIIb of the Periodic Table, group VIII of the Periodic Table, the lanthanide group of the Periodic Table, aluminum, silicon, boron, tin, magnesium, alkali metals and alkaline-earth metals;

- n denotes the valency of the metal;

- R₁, which may be identical or different, is chosen from linear and branched, saturated and unsaturated hydrocarbon-based radicals containing 1 to 30 carbon atoms,
- R and R', which may be identical or different, are chosen from hydrogen, linear, branched and cyclic, saturated and unsaturated, C₁₋₃₀ hydrocarbon-based radicals, and a cosmetically active group; and
- R'' is chosen from -O-, -NR²-, -S-, linear, cyclic and branched, saturated and unsaturated, C₁₋₃₀ divalent hydrocarbon-based radicals, and a cosmetically active group, wherein R² is chosen from linear, cyclic and branched, saturated and unsaturated C₁₋₃₀ hydrocarbon-based radicals;

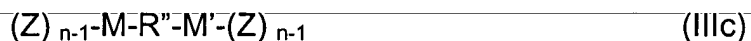
(b) at least one complex chosen from formulae (IIa), (IIb), (IIc) and (IIId) below:



wherein:

- M, M', n, R, R', R'' and R₁ have the same meaning as above;
- X is a ligand comprising an atom chosen from nitrogen, phosphorus, sulphur and oxygen; and
- x is the number of atoms which may link to the central metal atom;

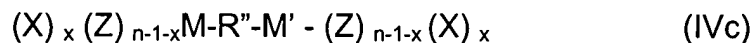
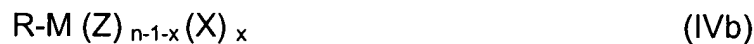
(c) at least one metal halide chosen from formulae (IIIa), (IIIb), (IIIc) and (IIId) below:





wherein:

- M, M', n, R, R' and R'' have the same meaning as above; and
 - Z, which may be identical or different, is chosen from a halogen atom; and
- (d) at least one complexes chosen from formulae (IVa), (IVb), (IVc) and (IVd) below:



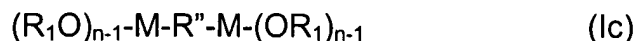
wherein:

- M, M', n, R, R', R'', X, x and Z have the same meaning as above; [and]

wherein said cosmetically active group is chosen from a colorant group; a photochromic group; a group for screening out UV-A and/or UV-B radiation; a group for promoting adhesion to keratin materials[, such as an amide, urethane, urea, hydroxyl, carboxyl, amino acid or polypeptide group]; a group which facilitates make-up removal; a bacterial or bacteriostatic group; a chelating group[, for example, one which can complex multivalent cations]; a hydroxy acid; a group for preventing hair loss; an antioxidant group; a free-radical-scavenging group; and a vitamin-bearing group; and
wherein said composition is effective to reduce the brittleness of human nails.

48. (Amended) A process for treating a keratin material which comprises applying to said keratin material a composition comprising at least one organometallic compound obtained from at least one metallic precursor chosen from:

(a) at least one metal alkoxide chosen from formulae (Ia), (Ib), (Ic), and (Id) below:

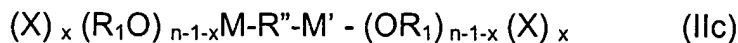


wherein:

- M and M', which may be identical or different, denote a metal atom chosen from the transition metals of groups Ib to VIIb of the Periodic Table, group VIII of the Periodic Table, the lanthanide group of the Periodic Table, aluminum, silicon, boron, tin, magnesium, alkali metals and alkaline-earth metals;
- n denotes the valency of the metal;
- R₁, which may be identical or different, is chosen from linear and branched, saturated and unsaturated hydrocarbon-based radicals containing 1 to 30 carbon atoms,
- R and R', which may be identical or different, are chosen from hydrogen, linear, branched and cyclic, saturated and unsaturated, C₁₋₃₀ hydrocarbon-based radicals, and a cosmetically active group; and
- R'' is chosen from -O-, -NR²-, -S-, linear, cyclic and branched, saturated and unsaturated, C₁₋₃₀ divalent hydrocarbon-based radicals, and a cosmetically active group, wherein R² is chosen from linear, cyclic and branched, saturated and unsaturated C₁₋₃₀ hydrocarbon-based radicals;

(b) at least one complex chosen from formulae (IIa), (IIb), (IIc) and (IId) below:

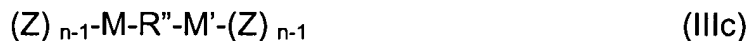




wherein:

- M, M', n, R, R', R'' and R₁ have the same meaning as above;
- X is a ligand comprising an atom chosen from nitrogen, phosphorus, sulphur and oxygen; and
- x is the number of atoms which may link to the central metal atom;

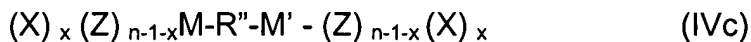
(c) at least one metal halide chosen from formulae (IIIa), (IIIb), (IIIc) and (IIId) below:



wherein:

- M, M', n, R, R' and R'' have the same meaning as above; and
- Z, which may be identical or different, is chosen from a halogen atom; and

(d) at least one complexes chosen from formulae (IVa), (IVb), (IVc) and (IVd) below:



wherein:

- M, M', n, R, R', R'', X, x and Z have the same meaning as above; [and]

wherein said cosmetically active group is chosen from a colorant group; a photochromic group; a group for screening out UV-A and/or UV-B radiation; a group for promoting adhesion to keratin materials[, such as an amide, urethane, urea, hydroxyl, carboxyl, amino acid or polypeptide group]; a group which facilitates make-up removal; a bacterial or bacteriostatic group; a chelating group[, for example, one which can complex multivalent cations]; a hydroxy acid; a group for preventing hair loss; an antioxidant group; a free-radical-scavenging group; and a vitamin-bearing group; and wherein said composition is applied to said keratin material in an amount effective to reduce the brittleness of human nails.

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